

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 May 2002 (23.05.2002)

PCT

(10) International Publication Number
WO 02/40514 A2

(51) International Patent Classification?: C07K 14/195,
A61K 39/02, G01N 33/569, C12Q 1/68

(21) International Application Number: PCT/CA01/01589

(22) International Filing Date:
15 November 2001 (15.11.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/248,864 15 November 2000 (15.11.2000) US

(71) Applicants and

(72) Inventors: FREY, Joachim [CH/CH]; Schreinerweg 9,
CH-3012 Bern (CH). STUBER, Katja [CH/CH]; Kappeli-
sackerstrasse 115, CH- 3063 Ittigen (CH). THORNTON,
Julian, C. [CA/CA]; 1219 Oscar Street, Victoria, British
Columbia V8V 2X6 (CA). KUZYK, Michael, A.
[CA/CA]; #303 - 1535 Jubilee Avenue, Victoria, British
Columbia V8R 4N4 (CA). BURIAN, Jan [CA/CA]; #80 -
1732 Newton Street, Victoria, British Columbia V8R 2R2
(CA).

(74) Agent: BARRIGAR, Robert, H.; Barrigar Intellectual
Property Group, Suite 830, Oceanic Plaza, 1066 West Hast-
ings Street, Vancouver, British Columbia V6E 3X1 (CA).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PI, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

WO 02/40514 A2

(54) Title: NOVEL TYPE III SECRETION PATHWAY IN *AEROMONAS SALMONICIDA*, AND USES THEREFOR

(57) Abstract: Disclosed is a newly identified and characterized type III secretion system in *Aeromonas salmonicida*. The invention also encompasses the use of components of the novel secretion system in immunoprotection against *A. salmonicida* infection, as well as other diagnostic and therapeutic uses thereof.